

****ATTENTION****

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10/90

Purple Martin

Progne subis

Range:

Breeds locally from southern Canada to northern Mexico. Winters in South America.

Washington Distribution:

Breeds primarily near water around Puget Sound and the Columbia River. Breeding pairs have been confirmed in San Juan, King, Pierce, Thurston, Mason, Clark, Skamania, and Gray's Harbor counties.

Habitat Requirements:

Purple martins are insectivorous swallows that nest in cavities. In Washington, most of the birds have been reported nesting in manmade structures near cities and towns in the lowlands of western Washington. Historically, they probably bred in old woodpecker cavities in large dead trees. Only a few such nests are known today. Nesting is more common now in bird boxes.

Purple martins feed in flight on insects. Favorable martin foraging habitat includes open areas, often located near moist to wet sites where flying insects are abundant.

Limiting Factors:

Availability of nesting cavities, which are not usurped by starlings and house sparrows.

Management Recommendations:

Purple martins are known to nest in cavities located in old pilings and occasionally in snags with clear air space and easy access. These pilings and snags (especially snags near water) should be protected and left standing. Snags should be retained during timber harvesting operations, including salvage operations after burns, blow-downs, and insect infestations. Prescribed burns can be used as a tool to create favorable martin foraging habitat. Create snags in forest openings, or at forest edges (e.g., by topping) where nesting cavities are lacking, especially within 10 miles of an existing purple martin colony. Insecticides should not be applied within at least seven and a half miles of martin nesting colonies in order to maintain a food base and avoid chemical contamination.

If natural sites are lacking and cannot be provided by manipulating habitat, artificial nesting sites can be provided according to the following specifications:

1) Construct nest boxes according to the designs such as that shown in Figure 1. Box dimensions should be at least 7" x 7" x 7", and preferably at least 10" deep. It is important to make the entrance exactly 1 1/4" high, without a threshold (i.e.

continuous with the porch floor). The top of the opening should be sanded smooth. The porch is a necessary feature, and the floor board should be rough to provide traction. These features will aid in dissuading starlings from taking over the nest boxes.

2) Protect boxes from wet weather by sealing edges with caulking material, painting or varnishing wood, using cedar for construction or protecting the roof with galvanized tin. Provide drainage holes in the box floor and ventilation holes near the top.

3) Locate boxes in existing colonies first. Locate additional boxes within 10 miles of existing colonies.

4) Locate boxes near water or wetlands with minimum clear air space of 15' (preferably 100') for circling and foraging about the nest. Erect houses 10' or more above the ground or water.

5) It is not necessary to remove martin nests from previous years. If you clean out old nesting material, do so in the spring and place the contents in a dry place beneath the nest. This is to allow for the emergence of chalcid wasps, which help to control *Protocalliphora*, a nestling parasite. The wasp larvae live in nest materials and will return to the martin boxes if old nests are left nearby.

6) Where starlings and house sparrows are a problem, plug the box entrances from October to mid-April. If starlings establish themselves in a box, remove their nests, eggs, and young on a routine basis (they will renest several times in a breeding season).

The same measures can be taken with house sparrows early in the breeding season, however removal of sparrow nests later in the cycle may cause sparrows to wander into martin nests and destroy their young. Adult sparrows may be controlled. If this is impossible, remove eggs and young, but leave sparrow nests in later months to prevent sparrows from taking over martin nests.

Starlings and house sparrows are not classified as a protected species. Their numbers may be controlled by trapping or shooting them around a martin colony.

References:

Adapted from:

Milner, R.L. 1988. Guidelines for establishing and maintaining a purple martin nest box colony. Unpublished report for the Washington Department of Wildlife.

United States Fish and Wildlife Service. 1985. Guidelines for the management of the purple martin, Pacific Coast population. USDI Fish and Wildlife Service, Portland, OR.

Key Points:

Habitat Requirements:

- Nest in natural and man-made cavities.
- Readily nest in bird boxes in areas where the species is already established.
- Usually nest in colonies.
- Feed on flying insects.

Management Recommendations:

- Retain snags during timber harvesting.
- Retain old pilings.
- Use fires in favorable martin foraging habitat, where appropriate.
- Create snags in forest openings and along forest edges if snags are lacking or limited.
- Avoid applying insecticides within 12 km (7.5 miles) of martin nesting colonies.
- Place nest boxes if cavities are lacking or limited and cannot be created (see text for details).